The Continuous Feed Ink Jet Production Market – 2014

Moving Forward

Now in its sixth full-year since its introduction, the continuous feed ink jet printer market continues to grow at enviable rate compared to virtually any other printer market. Simultaneously greater awareness is arising about the finite number of sites that can afford to adopt $1-5M continuous feed ink jet printing systems – systems designed mainly for transaction, direct mail, and book publishing applications.

Figure 1 What's new in the 2014 Continuous Feed Ink Jet Production Printer Forecast?

	2012-2013 Actuals	2013-2018 CAGR projected	Assumptions
Engine Unit Growth	19%	11%	More productive new systems mean fewer units required. No sub $0.5M continuous feed ink jet models will be introduced
Installed Base	39%	24%	No retirements occur before 2018
Page Volume	46%	30%	Growth driven by a combination of taking share from toner, offset; most critically is growth coming from new, first-time applications
Ink Revenue	41%	26%	Assumes no breakthroughs in enabling higher aqueous ink coverage per page
Total HW/Ink/Service Revenue	9%	16%	Includes both OEM and 3rd-party aftermarket revenue (assumption is very limited attrition to 3rd-parties due to uptime pressure and component cost business models

Source: I.T. Strategies, Inc.

The definition of page applications is blurring. For example, historically we defined a transaction page as a financial statement that required a recipient response. Today we are seeing those statements combined with personalized, non-solicited offers not just in the form of an onsert printed on the transaction page but also in the form of lifestyle-catalog format booklets. It is not quite transaction, not quite direct mail, but effectively a hybrid form of what we are calling a "new application page."

For the purposes of our forecast, we've tried to adhere as close to possible to the traditional definition of transaction, direct mail, and book publishing print. Effectively the number of total ink jet and toner-based transaction pages remains flat through 2018 (number of envelopes decline, but pages per envelop increase due to mandatory regulations of new disclosure information), but ink jet captures more than 2/3 of all transaction pages remaining by 2018.

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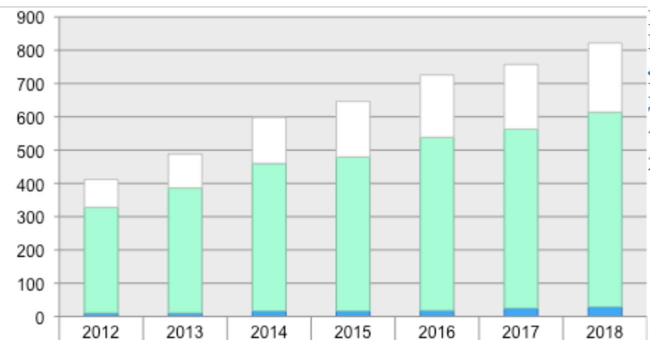
Ink jet printed direct mail pages are expected to quadruple between 2013 and 2018 – at a time when overall direct mail volumes are flat and likely to decline due to exigent postal rate increases in the US market (which accounts for about 2/3 of all direct mail pages printed worldwide). Ink jet printed direct mail pages are expected to grow dramatically as the need for higher return-on-investment driven by higher postage cost will require greater recipient offer relevancy. Big data will help enable the creation of higher quantities of highly relevant offers – suitable for high-speed ink jet production printing.

Book publishing page volume is also expected to quadruple from 2013 to 2018 as requirements for greater inventory efficiencies and compressed turnaround cycle necessitate a migration to ink jet printing for book manufacturers. It is one of the few production ink jet applications that is growing chiefly by capturing print volume from offset.

Forecast

There are many ways to size and categorize the production ink jet market. In an attempt to equalize the units measured as best as possible, I.T. Strategies has settled on tracking engines rather than systems. The growth rates for each segment vary depending on the stage of the life cycle, averaging 11% compounded annually for the market in total.



	2012	2013	2014	2015	2016	2017	2018
$1,250,000+ acquisition cost per engine	84	102	139	167	187	194	208
$800,000 to $1,250,000 acquisition cost per engine	318	376	444	463	520	539	586
<$800,000 acquisition cost per engine	10	10	16	16	18	24	28

Figure 2 Production Ink Jet Engine Forecast by Type of System, Worldwide 2012-2018

Source: I.T. Strategies, Inc.

Applications

There remain three core applications for continuous feed ink jet production printers: transaction, direct mail, and book printing. Transaction printer sales continue to do well, but a significant amount of placement volume was due to large account sales. Some of the sites purchased in excess of six engines in a single deal (all US-based), with one account reportedly acquiring in excess of 15 engines. In Europe there was above market rate growth of transaction print-focused systems, mainly benefitting from attractive ink jet hardware pricing encouraging replacement of toner continuous feed systems.

Engines for book printing applications grew in 2013 as existing accounts added more engines and average monthly print volumes increased, driving up machine utilization. It should however be growing more, as the technology and print quality are well proven at this stage in the market.

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Direct mail applications are starting to look more like transaction applications, as the ability to leverage highly relevant personalized data increases. While the hurdles to get there in terms of software, data mining, privacy balance, and relevancy are significant; those who have made the investments are a minimum of two-three years ahead of the competition.

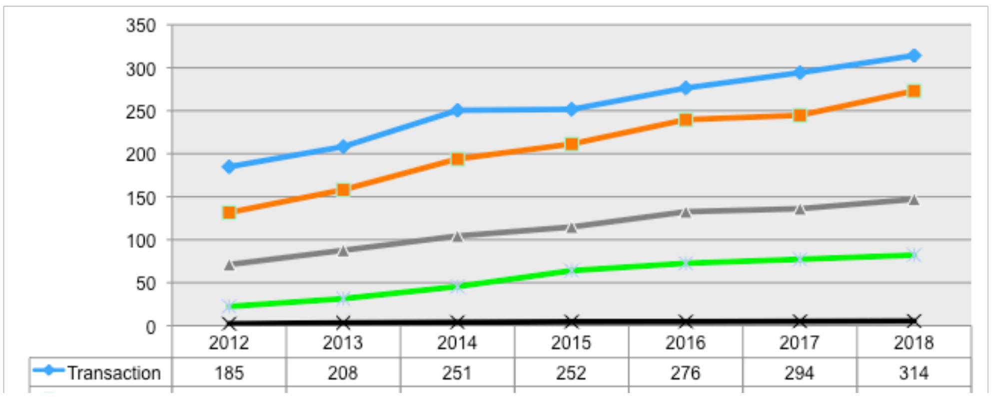


Figure 4 Engine Unit Sales by Applications, 2012-2018

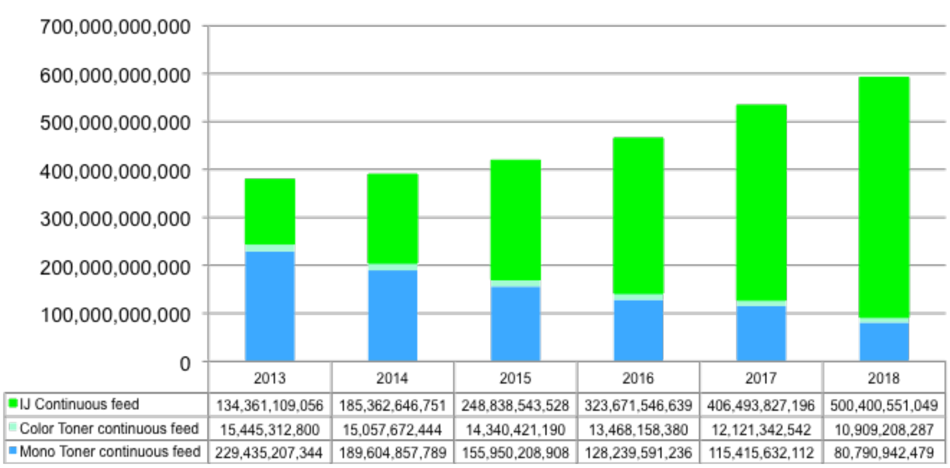
Source: I.T. Strategies, Inc.

The "Other application" includes those units that are neither strictly transaction nor direct mail printers. Some are printing variable data catalog inserts/onserts, some wealth management reports with photographic image content, customized travel itineraries/brochures, etc. The common link is the heavy dependency on mainly financial services-oriented variable data and color photographic images.

Page Volumes

IT Strategies projects 2014 will be the crossover year where more continuous feed ink jet pages will be printed than continuous feed toner pages. Not all of the ink jet share will be taken from toner; about 1/3 is expected to be derived from offset.

Figure 6 Page Volumes of toner and ink jet Continuous Feed Production printers, WW 2013-2018

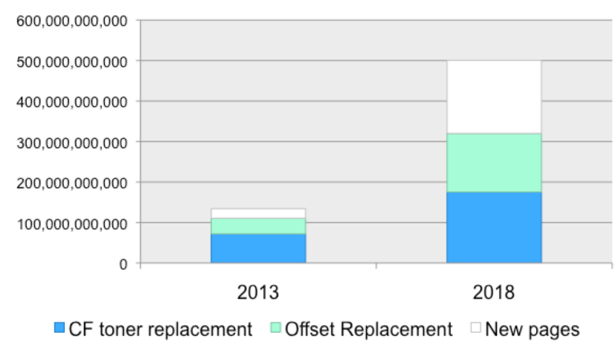


	2013	2014	2015	2016	2017	2018
IJ Continuous feed	134,361,109,056	185,362,646,751	248,838,543,528	323,671,546,639	406,493,827,196	500,400,551,049
Color Toner continuous feed	15,445,312,800	15,057,672,444	14,340,421,190	13,468,158,380	12,121,342,542	10,909,208,287
Mono Toner continuous feed	229,435,207,344	189,604,857,789	155,950,208,908	128,239,591,236	115,415,632,112	80,790,942,479

Source: I.T. Strategies, Inc.

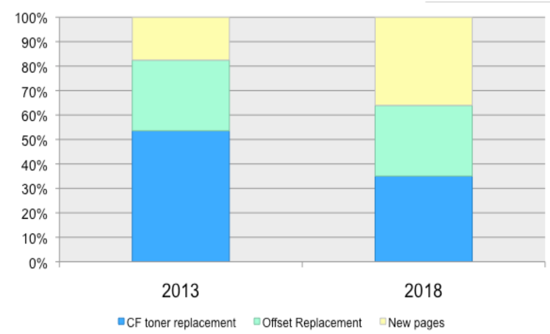
The offset replacement pages are mainly book pages, as the relentless shift towards shorter-run length book printing continues to work in favor of continuous ink jet printing technology. While an estimate, collectively it shows that by 2018 about 35% of pages will need to be sourced from new applications. These applications are apt to include a high-degree of personalized data—something that doesn't commonly exist today in the volumes projected. Many of these new application pages will be things like highly relevant loyalty reward coupons, personalized wealth management reports, personalized financial "magalogs", etc. There is arguably some overlap with transaction pages, and some might define these pages as transpromotional, but the common link is these applications did not require a response nor were they possible to produce with the degree of high-relevancy available today.

Figure 7 Estimated Source of Page Volumes by percent and billions of pages



Conclusion

The continuous feed ink jet production printer market is a great market to participate in for equipment manufacturers and print providers, especially in context of most other printer market segments.



Total revenue growth is expected to average 16% annually for the next five years. It may well grow even faster than projected in our forecast here, providing some of the ink coverage and substrate challenges get solved sooner than expected.

The focus on applications will be:

- Short-term: Remains transaction focused
- Mid-term: Must come from direct mail and books
- Long-term: general commercial print applications on broad range of substrates and PQ, with a heavy focus on variable data print value creation

While the journey to be able to print on inexpensive offset coated papers is underway, and may take more resources and time than we'd all like, these issues will probably be solved. The large-scale development and accessibility of variable data is a more complicated challenge. It involves the many more stakeholders, including the specifier who orders the print, the print provider, regulatory bodies, and ultimately the OEM equipment supplier in whose interest it is to have their customers print more page volumes, page volumes that are valuable. Both of these are good challenges to have, ones that the industry leaders will be working hard on to most efficiently and time effectively resolve. DRUPA 2016 should reveal the next evolutions in these needed technology advances.

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